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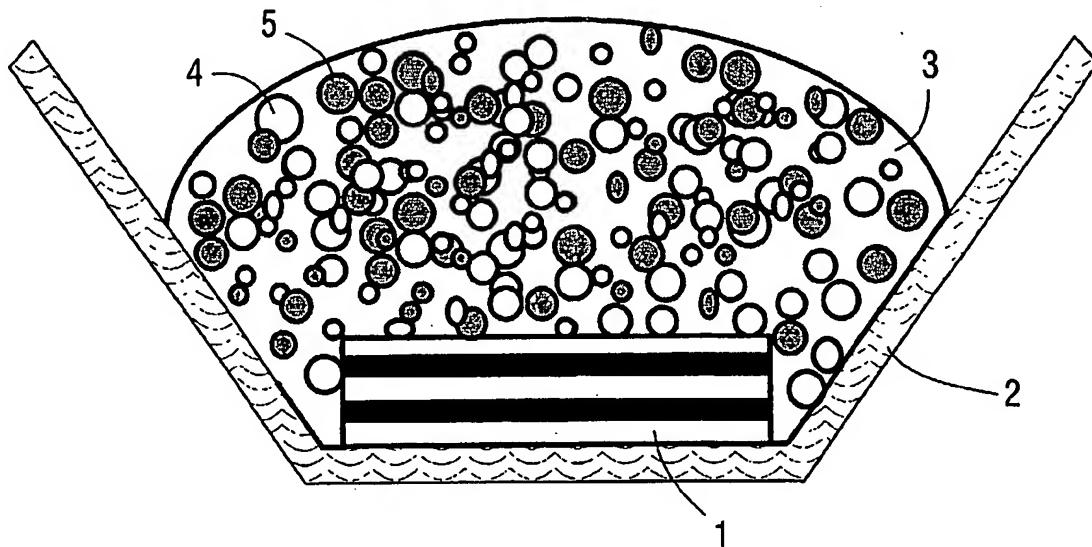
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(54) Title: **LIGHT-EMITTING DEVICE COMPRISING AN EU(II)-ACTIVATED PHOSPHOR**



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(57) Abstract: The invention concerns a light emitting device comprising a light emitting structure capable of emitting primary light of a wavelength less than 480 nm and a luminescent screen comprising a phosphor of general formula  $(Sr_{1-a-b}Ca_bBa_cMg_dZn_e)Si_xN_yO_z:Eu_a$ , wherein  $0.002 \leq a \leq 0.2$ ,  $0.0 \leq b \leq 0.25$ ,  $0.0 \leq c \leq 0.25$ ,  $0.0 \leq d \leq 0.25$ ,  $0.0 \leq e \leq 0.25$ ,  $1.5 \leq x \leq 2.5$ ,  $1.5 \leq y \leq 2.5$  and  $1.5 < z < 2.5$ . The invention also concerns a luminescent screen comprising a phosphor of general formula  $(Sr_{1-a-b}Ca_bBa_cMg_dZn_e)Si_xN_yO_z:Eu_a$ , wherein  $0.002 \leq a \leq 0.2$ ,  $0.0 \leq b \leq 0.25$ ,  $0.0 \leq c \leq 0.25$ ,  $0.0 \leq d \leq 0.25$ ,  $0.0 \leq e \leq 0.25$ ,  $1.5 \leq x \leq 2.5$ ,  $1.5 \leq y \leq 2.5$  and  $1.5 < z < 2.5$ . The invention also concerns a phosphor of general formula  $(Sr_{1-a-b}Ca_bBa_cMg_dZn_e)Si_xN_yO_z:Eu_a$ , wherein  $0.002 \leq a \leq 0.2$ ,  $0.0 \leq b \leq 0.25$ ,  $0.0 \leq c \leq 0.25$ ,  $0.0 \leq d \leq 0.25$ ,  $0.0 \leq e \leq 0.25$ ,  $1.5 \leq x \leq 2.5$ ,  $1.5 \leq y \leq 2.5$  and  $1.5 < z < 2.5$ .